S/023/041

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April 27, 2001

HAND DELIVERED
D. Wayne Hedberg, Permit Supervisor
Minerals Regulatory Program
UTAH DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1594 West North Temple, Suite 1210
Salt Lake City, Utah

Re: *Exploration Project Permit E/023/033*

Dear Mr. Hedberg,

On April 12, 2001, I wrote you a letter with accompanying attachments related to the subject above. In Attachment "A" to that letter, I addressed two groups of "Concerns" that you identified in a March 5th letter you wrote to my client, Mr. Spenst Hansen, which he received on March 14, 2001. I am writing today to complete our response regarding Concern #3.

The enclosure contains my client's detailed plans to finish the closure and reclamation of the six tunnel openings and pads identified under Concern #3, in full compliance with the Utah Reclamation of Mined Lands Act (Act) and pertinent Rules, as follows:

1. *C. E. Holden Tunnel.* Reinforce the outer mine timber barrier and increase the strength and configuration of the inner steel gate that the previous owner, Centurion Mines Corporation, installed in 1996.

2. *Grand Central Tunnel.* Side-fill the opening, smooth over the closure, and plant native seeds to re-vegetate the surface.

3. *Plummer Tunnel.* Permanently close the tunnel with a timber and lagging barrier that will stabilize the closure with a similar configuration, strength and reduced opening space as is proposed for the C. E. Holden Tunnel, described above.

4. *Ajax Mine Adit and Drill Pad.* Smooth and re-seed this essential turn-around to preserve the pad's future use. The adit and prospect pits were constructed prior to 1932 and no disturbance has occurred since the Act's effective date.

5. *Lower Mammoth Tunnel.* Increase the strength and configuration of the hinge attachments and safeguard the padlock inside a steel protection box to reinforce the existing security of the steel gate that the previous owner, Centurion Mines Corporation, installed in 1996.

6. *Mammoth 300 Ft. Level Tunnel.* Reduce the openings above and on the north side of the otherwise very secure, existing steel gate doors, and increase the strength and configuration of the hinge attachments and safeguard the padlock inside a steel protection box to reinforce the closure that the previous owner, Centurion Mines Corporation, installed in 1995.

The Act and Rules require concurrent reclamation, but do not require prior approval of plans for exploration or mining operations that disturb no more than five surface acres at any given time. Keystone Surveys has conformed its reclamation conduct and plans with the Act and Rules. The Legislature has not enacted additional laws and the Division has not published additional rule-making to guide Keystone Surveys' reclamation. Therefore, my clients shall continue to adhere to the Operation Practices expressed in Rule R647-2-107 and the Reclamation Practices expressed in Rule R647-2-109 regarding the areas comprising Concern #3.

As you will note, many of these areas were reclaimed and closed by Centurion Mines Corporation while conducting its 1995-96 exploration activities pursuant to its Notice of Intention to Conduct Exploration, under Exploration Project Permit No. E/023/033. Centurion transferred that Permit and its responsibilities to my clients on April 19, 2000. Prior to today's date, Keystone Surveys already has conducted additional reclamation and closure activities. It is going ahead with the detailed plans enclosed inasmuch as advance plan approval is not required. My clients assure the Division today that it shall complete these plans to fulfill its responsibilities under that Permit, in total compliance with the Act and Rule requirements.

Sincerely,

TRUJILLO & ASSOCIATES

Carlos M. Chavez, of counsel

/tw
enclosure (1)
cc: Mr. Lowell Braxton, Director
Utah Department of Natural Resources
Division of Oil, Gas & Mining
Board of Directors --
Mammoth Mining Company
Keystone Surveys, Inc.
Mr. Spenst Hansen
Kurt Seel, Asst. Attorney General

DETAILED CLOSURE AND RECLAMATION PLANS FOR OPENINGS, PADS, ETC. IDENTIFIED IN CONCERN #3, DOGM LETTER DATED MARCH 5, 2001 BY WAYNE HEDBERG

April 27, 2001

Re: S/023/041 & E/023/033
By: Certified Mail, Return Receipt

Keystone Surveys, Inc. and Mammoth Mining Company have agreed to reclaim the openings, pads, etc. identified and described in the following paragraphs (and referenced as Concern # 3 in the Hedberg letter dated March 5, 2001). Attached at the end of this proposal are photographs that provide further information regarding each of the items listed and described below.

Listing of openings, pads, etc. Keystone and Mammoth have agreed to reclaim.

1. ***C.E.Holden Tunnel (exhibit one);***
4. ***Grand Central Tunnel;***
11. ***Plummer Tunnel (exhibit eighteen);***
13. ***Ajax Mine Adit and Drill Pad (exhibit twenty);***
16. ***Lower Mammoth Tunnel (exhibit twenty-three);***
21. ***Mammoth 300 FT. level Tunnel (exhibit twenty-five).***

Detailed Closure and Reclamation Design Plans

1. C.E.HOLDEN TUNNEL

The Holden Tunnel was constructed in 1909 by U.S. Smelting and Refining Company to access the 550 level of the Centennial Eureka Mine. This tunnel is about 2550 feet in length and was used as the main entrance to the mine and the main ore haulage tunnel. The mouth of the tunnel is situated about 200 yards south of Highway 6, about 1 mile westerly from the Town of Eureka, Utah, and runs in a southeastery direction. The tunnel was closed by caving in 1940 and remained closed until July, 1988, when Centurion Mines Corporation (the predecessor operator) reopened the tunnel, installed necessary timbers, and used the tunnel to re-access the underground workings of the Centennial Eureka Mine.

About 1989 Centurion Mines Corporation installed a locked steel gate to prevent unauthorized access to the Holden Tunnel. These barriers are situated 41 feet apart (see photos 1-a and 1-b attached herewith). The outer barrier is constructed of mine timbers (8 in. x 8 in. timbers and 12 in. x 2 in. lagging). 41 feet inside the outer barrier a locked steel gate is installed which is firmly attached to the rock sides and roof around the tunnel opening. In order to access and inspect the inner steel gate, it was necessary to partially disassemble the outer timber barrier. This was done on or about March 31, 2001 by an

employee of Keystone Surveys, Inc. Examination of the existing outer barrier and inner steel gate established that there has been no unauthorized access.

Even though Keystone/Mammoth management believes that the present barriers are adequate, in the interests of maximizing the difficulty of unauthorized access we plan to do the following:

A. *Outer Timber Barrier at Mouth of the Tunnel.*

Remove the existing lagging and add additional pieces of lagging to make certain the spaces between lagging are 4 inches or less. The lagging will be reattached to the timbers using 3/8 inch lag screws 8 inches long instead of the present much smaller wood crews. This will render access through the outer barrier very difficult. The 4 inch space between the lagging will keep people out and still permit normal air flow to occur, and will provide access for small animals. See diagram in Appendix 1 at the end of this proposal.

B. *Inner Steel Gate.*

The existing steel gate is 8 ft. 5 in. in height and 9 ft. 3 in. wide, and is double swinging with a chain and lock in the center. Each of the two doors have 3 hinges that are welded to the steel gate and are attached by screws to the upright mine timbers firmly attached to the surrounding rock. The gate is constructed of 2 in. steel pipe welded together covered by chain link fencing wired in place. Our plan is to re-attach the hinges to the upright mine timbers using carriage bolts that cannot be removed from the front of the gate. We plan then to remove the chain link fencing and replace it with horizontal 1 in. steel pipe welded in place with not more than 4 inches of space between the pipe. The gate will be kept locked using a secure steel locking device so constructed that it is protected from destruction by sledge and hacksaw.

C. *Summary*

The outer mine timber barrier should be adequate to stop access by trespassers. However, should anyone breach the outer mine timber barrier, they will be stopped by the secure steel gate 41 feet inside. We believe this closure approach will render this tunnel secure from unauthorized entrance, and still provide for natural air movement.

4. GRAND CENTRAL TUNNEL

The Grand Central Mine Tunnel was constructed about 1930 by American Smelting and Refining Co. that held the property under lease from the owners of the mine at that time. This tunnel extended northward about 300 feet and intersected the Grand Central shaft at about the 200 level. This tunnel was used for mine access and ore haulage until ASARCo discontinued operations about 1933. Centurion Mines Corporation partially reopened this tunnel about 1995. Centurion's efforts were only partially successful. The tunnel was not repaired all the way to the shaft because the full repair proved more

expensive than had been anticipated. At the present time the tunnel is believe to be dangerous because of weak and caving "ground" surrounding the present opening.

It is planned that a bulldozer be used to move soft mine dump material and unconsolidated alluvial material situated immediately to the west of the tunnel mouth to block the tunnel opening. It is further planned that at least 10 to 12 feet of material be placed in front of the tunnel opening, and pushed inside the tunnel in the amount reasonably possible. As soon as the fill material is in place, the upper lip of the tunnel will be caved down to make the sealing of the tunnel opening complete. Additional fill material will be pushed in front of and above the present tunnel opening to provide a further barrier. Rock outcrops to the east of the tunnel opening indicate that only limited quantities of fill material will be available from that side. Because of caving conditions, it is considered unwise for heavy mechanized equipment to attempt to operate on top of the tunnel until it has been filled from the front. Until the portal is filled, the tunnel top could cave in under the weight of a bulldozer or backhoe with possible injury to the operating personnel. A local earth-moving contractor will be used for this work.

Immediately after the tunnel has been filled, the surface will be smoothed with hand tools (rakes and shovels) and native seeds will be planted so that the surface will be re-vegetated with native species.

11. PLUMMER TUNNEL

This tunnel was originally constructed to mine near surface ores at the Mammoth Mine more than 100 years ago. In 1995 Centurion Mines Corporation reopened the Plummer Tunnel to investigate the mining of previously identified ore zones accessed by that tunnel. The Plummer tunnel work was stopped by Centurion in March 1996, when the mineralized zones accessed were determined to be non-commercial. The tunnel was then abandoned, but not closed or sealed. The surface of the tunnel is shown on Photo 11-a with the close-up shown in Photo 11-b. Pen markings on Photo 11-b indicate dimensions of the existing timber, and illustrate the planned closure of the underground portion of the tunnel. The tunnel runs from West to East about 200 feet south from the main Mammoth shaft. During the summer of 2000, employees of Keystone/Mammoth removed surface timbers and the 130 ft. long ore chute that had been constructed to handle ore and waste rock mined through the Plummer Tunnel.

Our planned closure of the Plummer Tunnel is to build a barrier using horizontal mine lagging at the third set of timbers (13 feet inside from the surface). See Photo 11-b. The portal opening is 14 ft. 9 in. with several 10 in. x 10 in. upright mine posts with caps rendering the portal safe (see photo 11-a). Thirteen feet inside from the portal, the tunnel itself begins. At this location, the tunnel width is 6 ft. (measured inside the first set of timbers) with a height of 6 ft. 3 in. It would be difficult, because of the irregular dimensions at the surface, to build an effective gate or barricade at the surface portal. Therefore, it is planned that 5 pieces of mine lagging (2 in. x 12 in x 8 ft.) be attached to the outside of the third set of timbers using 3/8 in. x 8 in. lag screws. This will leave no

more than 4 inches of space between the timbers (small enough to keep people out), and will render this tunnel secure from unauthorized access.

13. AJAX MINE ADIT AND DRILL PAD.

The drill pad has maximum length dimension of 76 feet (N-S) with a maximum width dimension of 52 feet (E-W)---see photo 13-a. This drill pad is currently being used as a "turn-around" on the Nad Breccia Road, and needs to be preserved for that use. We plan to use hand tools including rakes and shovels to smooth out the surface and plant native varieties of grass and other vegetation. The adits and prospect pits near the Ajax drill pad, including the Ajax mine adit, were constructed previous to July 1977. None of these pre-law adits or prospect pits were disturbed by mechanized equipment subsequent to July, 1977. The only post-law disturbance at or near this site, involves the repair of the previously existing Nad Breccia road and the construction of the Ajax drill pad near the end of that road.

16. LOWER MAMMOTH TUNNEL

The Lower Mammoth Tunnel was constructed about 1898 and was the only surface access to the Lower Mammoth Mine. The Lower Mammoth Tunnel is about 1800 feet in length and accesses the underground shaft of the Lower Mammoth Mine. It runs from West to East and begins about ¼ mile southwesterly from the Main Mammoth Shaft. This Tunnel was re-entered by Centurion in 1995 and new timber was installed where necessary to make the Tunnel safe for reconnaissance. A limited amount of underground mapping and sampling for reconnaissance purposes was carried out during 1995 and 1996 by Centurion geologists. Sometime prior to March, 1996 the present gate was installed to prevent access by unauthorized persons.

The existing steel gate presently blocks the entrance to the Lower Mammoth Tunnel. This steel gate is in good condition and is very strong. The gate is constructed of welded steel bars and rods. The vertical bars are 3/16 in. x 1 in. steel flatbar. The horizontal pieces are 3/8 in. round steel rod. The vertical flatbar and horizontal rods are welded together at each intersection. The maximum openings are 1 inch or less. The gate is situated 6 ft. inside the tunnel portal, and is securely attached to well installed mine posts and caps. The gate is supported by three hinges on the south and a secure steel hasp and padlock on the north.

The only weakness that we can identify with the present closure of the Lower Mammoth Tunnel is in the construction of the hinges and padlock. We plan to change the attachment of the hinges from screws (as at present) to carriage bolts with nuts on the inside of the upright timber to which they are attached. A steel protection box can be constructed around the padlock in order to safeguard it from sledge damage and make it

resistant to hacksaw removal. These modifications to the presently installed steel gate will safeguard this tunnel from unauthorized entry.

21. MAMMOTH 300 FT. LEVEL TUNNEL

The Mammoth 300 level Tunnel was constructed about 1900 to provide a more convenient access to the Mammoth Shaft than that provided by the surface road, and to avoid the necessity of hauling ore by road from the original shaft collar about 1000 feet by road uphill. The tunnel is about 450 feet long and connects with the Mammoth Shaft on the 300 level, where an underground hoist station has been constructed. This tunnel runs from West to East with the portal on the north side of the Mammoth Mine Center. In 1995 Centurion Mines Corporation rebuilt the portal of the Mammoth 300 Level Tunnel with steel plate and 8 inch pipe in order to reduce the risk of fire, and make the portal to the tunnel stronger and more secure. Centurion performed no additional surface disturbance beyond what had been historically carried out.

The entrance to the Mammoth 300 level tunnel is presently in very good condition, being constructed out of 8 in. diameter steel pipe and ¼ inch steel plate. The door is built in two sections with two hinges on each side with a chain and padlock holding them together. The south door is 5 ft. 10 in. wide, 6 ft. 6 in high, and is constructed of welded steel pipe and 1/8 inch thick steel diamond plate welded to the pipe. The maximum opening size on the south door is less than 1 inch. The north door is 1 ft. wide, and is constructed of welded steel pipe, with maximum opening size about 10 in. x 8 in. There is a gap of up to 1 ft. on both the top of the steel door and on the north side.

We plan to weld 1 inch diameter steel pipe vertically on the north door to reduce the minimum dimension of openings to 4 inches. Also, we plan to weld additional sections of 1 inch steel pipe above the door and on the north side to reduce the minimum opening dimension to 4 inches or less. The hinges on the north door also will be strengthened and a protective padlock cover installed that is resistant to sledge damage and to hack saw removal. These modifications to the existing steel gate will prevent unauthorized access.. See Appendix 21

CONCLUSION

We plan on improving the gates/barriers and/or reclaiming the above listed 6 openings, and pads, as described herein. This construction will be completed within 60 days from the present date. Please review the enclosed proposals and advise us of any comments or suggestions that the Division may have. Representatives of the Division are invited to visit the various sites and discuss them with representatives of Keystone/Mammoth.

PHOTO 21 (a) --- LOOKING EASTERLY TOWARD PORTAL OF MAMMOTH 300 LEVEL TUNNEL. NOTE WELDED STEEL CONSTRUCTION FROM 8 INCH PIPE AND STEEL PLATE OUTSIDE PORTAL. NOTE ALSO WELL CONSTRUCTED HEAVY STEEL GATE WITH DIAMOND STEEL COVER.

PHOTO 1 (a) --- LOOKING SOUTHEASTERLY TO OUTER TIMBER BARRIER BLOCKING PORTAL OF THE HOLDEN TUNNEL.

PHOTO 1 (b) --- LOOKING SOUTHEASTERLY INSIDE HOLDEN TUNNEL AT STEEL GATE 41 FEET INSIDE TIMBER OUTER BARRIER. NOTE YARDSTOCK FOR SCALE.

PHOTO 4 (a) --- LOOKING NORTHERLY TO PORTAL OF GRAND CENTAL TUNNEL. NOTE MINE DUMP AND ALLUVIAL FILL ON SOUTH (LEFT) SIDE. NOTE UNCONSOLIDATED "LIP" ABOVE TUNNEL PORTAL.

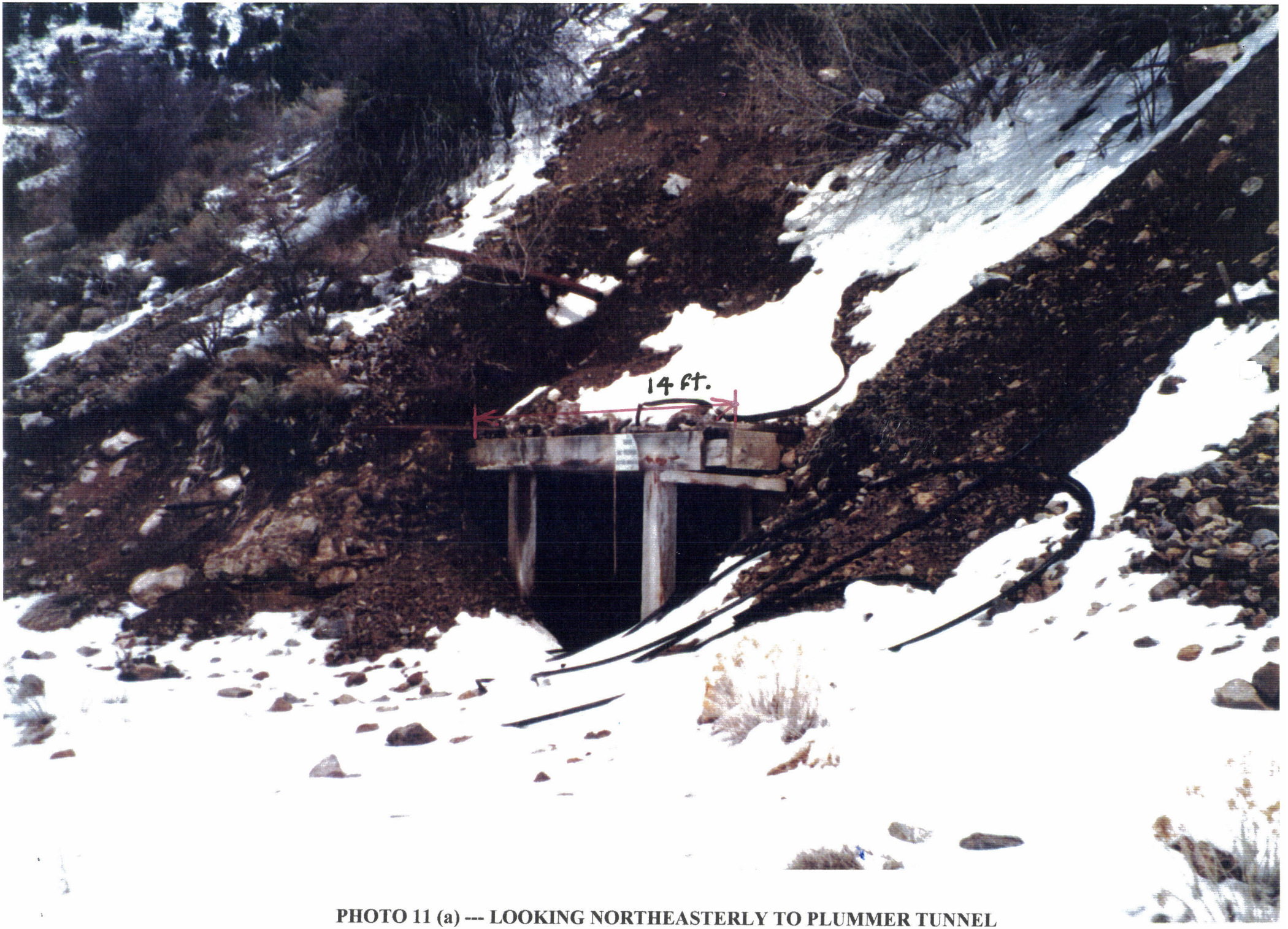

PHOTO 11 (a) --- LOOKING NORTHEASTERLY TO PLUMMER TUNNEL PORTAL.

PHOTO 11 (b) --- LOOKING EASTERLY INTO PLUMMER TUNNEL. THIRD SET OF TIMBERS IS MARKED WHERE HORIZONTAL LAGGING WILL BE ATTACHED WITH 8 INCH LAG SCREWS.

PHOTO 13 (a) --- LOOKING SOUTHERLY ALONG NAD BRECCIA ROAD ACROSS AJAX DRILL PAD.

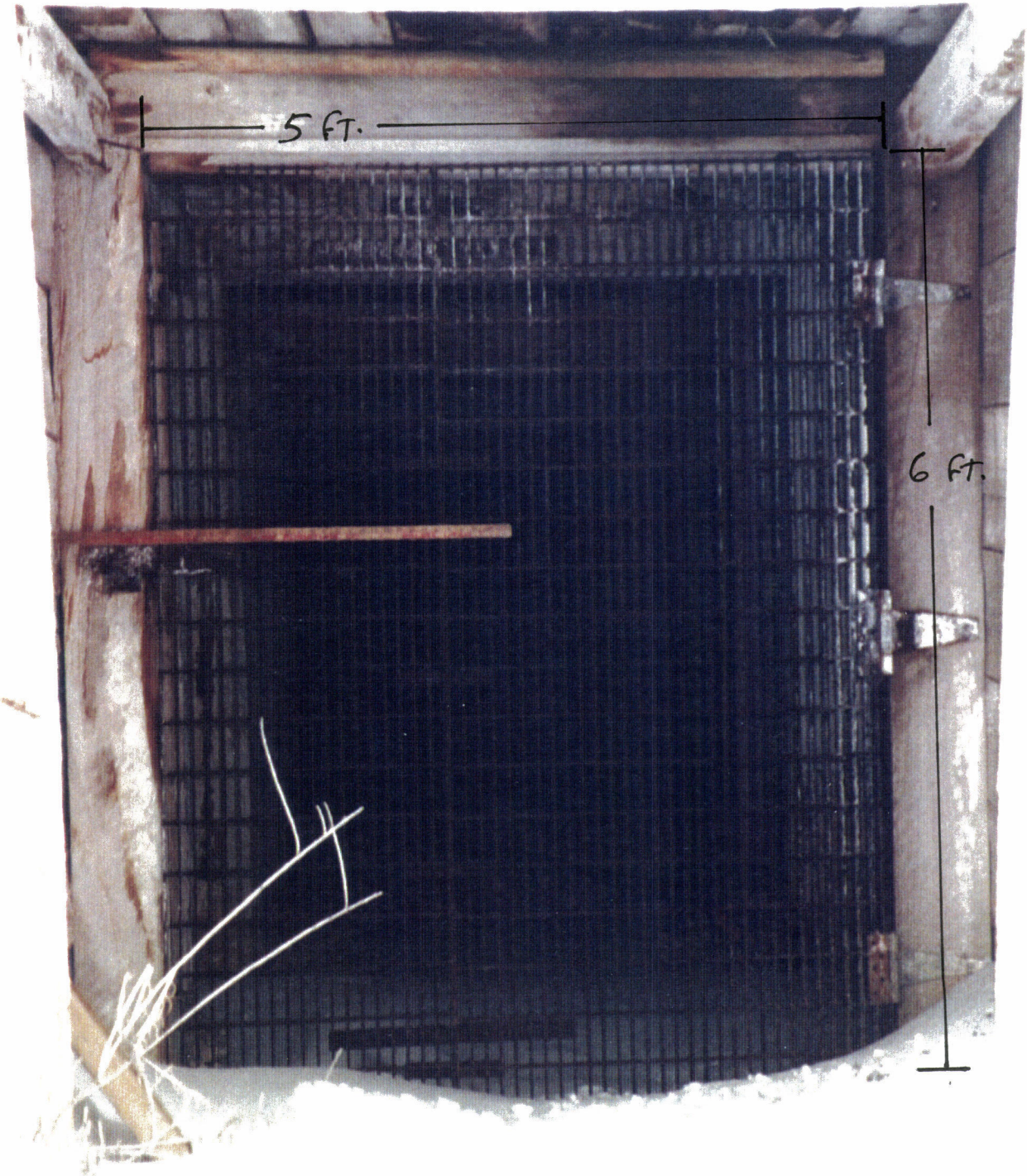

PHOTO 16 (a) --- LOOKING EASTERLY INTO LOWER MAMMOTH TUNNEL. NOTE 3 HINGES ON SOUTH SIDE (RIGHT) AND LOCKING MECHANISM ON NORTH SIDE OF STEEL GATE.